



## PATENT ABSTRACTS OF JAPAN

(11) Publication number: **2001281264 A**(43) Date of publication of application: **10.10.01**

(51) Int. Cl.

**G01P 15/125**  
**G01L 1/14**  
**H01L 29/84**  
**// G01C 19/56**  
**G01P 9/04**

(21) Application number: **2000097907**(22) Date of filing: **30.03.00**(71) Applicant: **DENSO CORP**

(72) Inventor: **MURATA MINORU**  
**SAKAI MINEICHI**

(54) **SEMICONDUCTOR DYNAMIC QUANTITY**  
**SENSOR**

(57) Abstract:

**PROBLEM TO BE SOLVED:** To reduce variations in the working of a beam part in a semiconductor acceleration sensor which is formed by etching a semiconductor layer arranged on a support substrate and detects an applied acceleration based on changes in interval between a mobile electrode allowed to be displaced by the rectangular frame shaped beam part and a stationary electrode fixed on the support substrate.

**SOLUTION:** Opposing intervals  $d_2$  and  $d_3$  between a beam part 22 and a fixed part 30 in the direction Y of displacement of the beam part 22 are made equal to the width  $d_1$  of a frame hollow part of the beam part 22 in the direction Y of the displacement. This makes etching opening widths the same in the direction Y of the displacement depending on the portion between the beam part 22 and the fixed part 30 and the frame hollow part at the beam part 22

thereby making both etching parts almost the same in etching rate.

COPYRIGHT: (C)2001,JPO

